Exhibit 7

Highly Confidential - Subject to Further Confidentiality Review

```
 1        IN THE UNITED STATES DISTRICT COURT
         FOR THE NORTHERN DISTRICT OF OHIO
 2                 EASTERN DIVISION
                     -  -  -
 3   IN RE:  NATIONAL          :  HON. DAN A.
     PRESCRIPTION OPIATE       :  POLSTER
 4   LITIGATION                :  MDL NO. 2804
                               :
 5   This document relates to: :  Case No. 17-MD-2804
                               :
 6   The County of Summit, Ohio :
     Ohio et al. v. Purdue Pharma :
 7   L.P., et al., Case No.     :
     17-OP-45004                :
 8                             :
     The County of Cuyahoga v. :
 9   Purdue Pharma Purdue Pharma :
     L.P., et al., Case No.     :
10   18-OP-45090                :
11                   -  -  -
12         - HIGHLY CONFIDENTIAL -
     SUBJECT TO FURTHER CONFIDENTIALITY REVIEW
13
                   VOLUME I
14                   -  -  -
                 May 9, 2019
15
16         Videotaped deposition of
     CRAIG J. McCANN, Ph.D., CFA, taken
17   pursuant to notice, was held at the law
     offices of Morgan Lewis & Bockius, LLP,
18   1111 Pennsylvania Avenue, NW, Washington,
     D.C., beginning at 10:03 a.m., on the
19   above date, before Michelle L. Gray, a
     Registered Professional Reporter,
20   Certified Shorthand Reporter, Certified
     Realtime Reporter, and Notary Public.
21
                     -  -  -
22
           GOLKOW LITIGATION SERVICES
23     877.370.3377 ph | 917.591.5672 fax
                deps@golkow.com
24
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1 your March 25th report or either of your
2 supplements to the ARCOS data in this
3 litigation?
4   A.   Not as I sit here.
5   Q.   And when you say that, you
6 say because you might do some later, but
7 you haven't been asked to yet?
8   A.   Right. It's not something I
9 intend to do or that I am contemplating
10 as I sit here. But there might be
11 additional facts developed or there might
12 be some instruction from the court or for
13 some other reason, another alternative
14 may come to mind that I would develop and
15 implement. But I -- I don't have
16 anything in mind, as I sit here.
17   Q.   So even though you say that
18 in Section 9 you are describing a
19 nonexhaustive set of algorithms, you're
20 not meaning that to say that you have not
21 listed all the algorithms that are
22 forming your opinions in this report in
23 this report?
24   A.   Correct.

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1   Q.   And you say that the
2 algorithms can be systematically applied.
3 Do you see where it says that?
4   A.   Yes.
5   Q.   And in saying can be
6 systematically applied, are you saying
7 that they are appropriate or should be
8 applied or -- are you taking that
9 opinion?
10   A.   No, I think that would get
11 into some subject matter expertise that
12 I'm not claiming to have. I was asked to
13 implement these algorithms, which at some
14 broad level, has some assumptions. And
15 then make an additional assumption or
16 two, apply it to the data and report out
17 the results. And that's what I've done.
18   Q.   So speaking in a broad
19 level, which I think makes sense to start
20 and then we'll get a little bit more
21 specific.
22   And I don't mean this to be
23 pejorative in any way. But is it fair to
24 say that you are serving in a role like a

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1 computer, a sort of old school computer,
2 that -- that you are taking in the data,
3 processing it and putting out output in
4 your opinions?
5   A.   Yes. Exactly.
6   Q.   Okay. And you're not saying
7 that the sort of black box that data is
8 going into is the right or the only
9 algorithm to be used on that data. You
10 are just the one who is actually doing
11 the calculations; is that correct?
12   A.   Well, close. It's not a
13 black box at all. A black box is
14 something where something -- data goes in
15 and results come out and you can't tell
16 what's happening. In fact, this is not a
17 black box. It's the opposite of that.
18   I'm describing for you in
19 detail, I think, exactly what's being
20 done to the data. I don't take a
21 position on whether -- which or if any of
22 these algorithms and the associated
23 assumptions are appropriate, I think was
24 the word you used earlier?

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1   Q.   Yep.
2   A.   I'm just saying that you
3 take the -- the data that we've prepped,
4 and apply these formulas to it, you get
5 particular results.
6   Q.   And is that also true not
7 only about whether those algorithms, the
8 assumptions, are appropriate, but also
9 true that you are not making any opinion
10 as to whether they are legally required?
11   A.   Right. I think all of these
12 issues are being handled by other
13 experts. I -- as you said a minute ago.
14 And I didn't take it as a pejorative.
15 I'm just serving as a calculator.
16   Q.   And in this Paragraph 21 you
17 use the -- the phrase "algorithms" to
18 discuss what's being applied in
19 Section 9. But you also use the word
20 "approaches" later I believe.
21   Are you saying the same
22 thing?
23   So are -- in -- calling it
24 algorithms here in Paragraph 21, are you

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1 describing what you later in your report
2 call an approach, Approach 1, Approach 2,
3 Approach 3?
4   A.   Yes.
5   Q.   Let's take a look at
6 Section 9. So in particular I'll point
7 you to Paragraph 130, which is -- starts
8 on Page 56.
9   Are you there?
10   A.   Yes.
11   Q.   Great. And the section
12 heading is "Transaction Analysis."
13   Do you see that?
14   A.   Yes.
15   Q.   And this is what we were
16 just referring to when we were talking
17 about the algorithms?
18   A.   Yes.
19   Q.   And Paragraph 130 starts, "I
20 implemented various approaches to
21 identify transactions meeting specified
22 criteria using the non-public ARCOS data
23 from 2006 to 2014, supplemented with
24 defendant transaction data where the

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1 ARCOS data is obviously missing
2 transactions that are included in the
3 transactions produced by defendants in
4 discovery, and to the extent I have
5 defendant transaction data for the
6 periods before 2006 and after 2014, I
7 calculated the results separately for
8 each of the 12 controlled substance drug
9 codes."
10   Do you see that?
11   A.   Yes.
12   Q.   And then you have a footnote
13 there that "you do not analyze
14 transactions in two treatment drugs,
15 buprenorphine and methadone."
16   Do you see that?
17   A.   Yes.
18   Q.   How did you pick that list
19 of 12 controlled drug codes?
20   A.   Well, by taking the 14 drug
21 codes we received from the DEA and
22 excluding the two, what I understand to
23 be treatment drugs identified in
24 Footnote 54.

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1   Q.   Okay. And you didn't -- you
2 didn't apply any other criteria?
3   A.   Not that I can think of.
4   Q.   Okay. In that Paragraph 130
5 that I just read out, you say at the
6 beginning that you implemented various
7 approaches. And is that talking about
8 the approaches that are discussed later
9 in that section, Approaches 1, 2, 3, 4
10 and 5?
11   A.   Yes.
12   Q.   You are not talking about
13 anything else than that?
14   A.   Correct.
15   Q.   And then you have five
16 approaches in this report; is that
17 correct?
18   A.   Yes.
19   Q.   And the first one is the
20 maximum monthly trailing six-month
21 threshold, correct?
22   A.   Correct.
23   Q.   And the second is the twice
24 trailing 12-month average pharmacy dosage

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1 units, correct?
2   A.   Yes.
3   Q.   And we can do it slower,
4 sorry, you're flipping through.
5   MR. MOUGEY: Which page are
6   you referencing?
7   MS. McENROE: I'm just going
8   through a list of them, but --
9   MR. MOUGEY: Right.
10   MS. McENROE: -- that's
11   fine.
12 BY MS. McENROE:
13   Q.   The third one starts on
14 Page 64. So the third one is the three
15 times trailing 12-month average pharmacy
16 dosage units; is that correct?
17   A.   Yes.
18   Q.   The fourth one starts on
19 Page 68, is the maximum 8,000 dosage
20 units monthly; is that correct?
21   A.   Yes.
22   Q.   And the fifth one, starts on
23 Page 72, is maximum daily dosage units.
24   Do you see that?

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1 your March 25th report or either of your
2 supplements to the ARCOS data in this
3 litigation?
4   A.   Not as I sit here.
5   Q.   And when you say that, you
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9 intend to do or that I am contemplating
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13 some other reason, another alternative
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19 nonexhaustive set of algorithms, you're
20 not meaning that to say that you have not
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24   A.   Correct.

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7 that they are appropriate or should be
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15 then make an additional assumption or
16 two, apply it to the data and report out
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19 level, which I think makes sense to start
20 and then we'll get a little bit more
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23 pejorative in any way. But is it fair to
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2 that -- that you are taking in the data,
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1   Q.   Yep.
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4 and apply these formulas to it, you get
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10 as to whether they are legally required?
11   A.   Right. I think all of these
12 issues are being handled by other
13 experts. I -- as you said a minute ago.
14 And I didn't take it as a pejorative.
15 I'm just serving as a calculator.
16   Q.   And in this Paragraph 21 you
17 use the -- the phrase "algorithms" to
18 discuss what's being applied in
19 Section 9. But you also use the word
20 "approaches" later I believe.
21   Are you saying the same
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23   So are -- in -- calling it
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6 Section 9. So in particular I'll point
7 you to Paragraph 130, which is -- starts
8 on Page 56.
9   Are you there?
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11   Q.   Great. And the section
12 heading is "Transaction Analysis."
13   Do you see that?
14   A.   Yes.
15   Q.   And this is what we were
16 just referring to when we were talking
17 about the algorithms?
18   A.   Yes.
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20 implemented various approaches to
21 identify transactions meeting specified
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23 from 2006 to 2014, supplemented with
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2 transactions that are included in the
3 transactions produced by defendants in
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5 defendant transaction data for the
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13 there that "you do not analyze
14 transactions in two treatment drugs,
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19 of 12 controlled drug codes?
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21 codes we received from the DEA and
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23 be treatment drugs identified in
24 Footnote 54.

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1   Q.   Okay. And you didn't -- you
2 didn't apply any other criteria?
3   A.   Not that I can think of.
4   Q.   Okay. In that Paragraph 130
5 that I just read out, you say at the
6 beginning that you implemented various
7 approaches. And is that talking about
8 the approaches that are discussed later
9 in that section, Approaches 1, 2, 3, 4
10 and 5?
11   A.   Yes.
12   Q.   You are not talking about
13 anything else than that?
14   A.   Correct.
15   Q.   And then you have five
16 approaches in this report; is that
17 correct?
18   A.   Yes.
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20 maximum monthly trailing six-month
21 threshold, correct?
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24 trailing 12-month average pharmacy dosage

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1 units, correct?
2   A.   Yes.
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4 sorry, you're flipping through.
5   MR. MOUGEY: Which page are
6   you referencing?
7   MS. McENROE: I'm just going
8   through a list of them, but --
9   MR. MOUGEY: Right.
10   MS. McENROE: -- that's
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12 BY MS. McENROE:
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14 Page 64. So the third one is the three
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16 dosage units; is that correct?
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20 units monthly; is that correct?
21   A.   Yes.
22   Q.   And the fifth one, starts on
23 Page 72, is maximum daily dosage units.
24   Do you see that?

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1   A.   I do.
2   Q.   So if I refer to your five
3 approaches, will you understand that I'm
4 referring to those five approaches as
5 I've just read them out?
6   A.   Yes.
7   Q.   Did you apply any other
8 approaches aside from those five in
9 reaching your conclusions?
10   A.   Not with respect to the
11 conclusions I reached in Section 9 at
12 least.
13   Q.   Okay. From where did you
14 get the five approaches that you apply in
15 Section 9?
16   A.   From discussions with
17 counsel.
18   Q.   Who? Is it the same list of
19 people that we discussed earlier today?
20   A.   Yes. There may be some
21 additional lawyers whose names didn't
22 come to mind when I was giving you the
23 names of people I interacted with
24 earlier.

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1   Q.   Anyone come to mind?
2   A.   It would be -- it would be
3 something like that list and perhaps
4 more.
5   Q.   Anyone in particular that
6 you think you left out earlier that comes
7 to mind?
8   A.   No.
9   Q.   Did you get any input on
10 these five approaches from any of your
11 discussions with current or former DEA
12 agents?
13   A.   No.
14   Q.   Did you take any other step
15 to verify with the DEA that any or all of
16 these approaches are appropriate in this
17 setting?
18   A.   I'm sorry. I don't know
19 what you mean by any other, but I didn't
20 do anything other than serve as the
21 computer, you referred to me as earlier.
22 I took these approaches and implemented
23 them, applied them to the data. That's
24 what I did.

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1   Q.   Okay. So just so that I can
2 make sure that I have it all straight.
3 So you got the five approaches from
4 plaintiffs' counsel, and you applied them
5 to the data, and that's it, with respect
6 to Section 9?
7   A.   Correct.
8   Q.   So it's fair to say that any
9 one of these approaches could be or could
10 not be appropriate for use in this
11 particular setting; you're just not
12 taking an opinion on that one way or the
13 other?
14   A.   Right. I think other
15 witnesses are going to deal with that
16 issue.
17   Q.   And just to make sure I'm
18 totally clear, you're not opining
19 anywhere that any of these approaches is
20 or is not required by law in any way?
21   A.   Correct.
22   Q.   I think you mentioned
23 earlier that there are certain
24 assumptions that are built into your

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1 approaches. Do you remember mentioning
2 that?
3   A.   Yes.
4   Q.   Let's take a look at Page
5 100 -- sorry, Paragraph 131 of your
6 report.
7   This is under the Heading A,
8 "Maximum Monthly Trailing Six-Month
9 Thresholds."
10   Do you see that?
11   A.   Yes.
12   Q.   Okay. And in this
13 paragraph, it starts, "Under the first
14 approach, I identify transactions that
15 cause the number of dosage units shipped
16 by a distributor to a pharmacy in a
17 calendar month to exceed the highest
18 number of dosage units shipped by the
19 distributor to the pharmacy in any one of
20 the six preceding calendar months."
21   Did I read that correctly?
22   A.   Yes.
23   Q.   And then you go on and you
24 have an example, right? It says, "For

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1   if it's exactly what you
2   described. But we -- we did other
3   analysis.
4 BY MS. McENROE:
5   Q.   Without that assumption
6 about the first triggering transaction
7 flagging the remainders?
8   A.   Correct.
9   Q.   Across the different -- the
10 five different approaches?
11   A.   I don't recall whether that
12 is correct or not.
13   Q.   So you don't know one way or
14 the other, but you may have?
15   A.   Correct.
16   Q.   And do you have a sense of
17 the difference that this one assumption
18 makes about flagging the subsequent
19 transactions in terms of the number of
20 transactions or the proportion of
21 transactions that are flagged?
22   MR. MOUGEY: Objection.
23   THE WITNESS: I have some
24   general intuition. I don't

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1   have -- I don't -- I don't have a
2   quantified answer for you. But I
3   have a general intuition.
4 BY MS. McENROE:
5   Q.   What's your general
6 intuition?
7   A.   Well, because for most of
8 these defendants, you see a substantial
9 increase over time, especially leading up
10 to 2010 or 2011. If you reset that
11 trailing six-month maximum to be the
12 maximum of the most recent six months,
13 then you end up with fewer transactions
14 being flagged.
15   Q.   Okay. So it would be a
16 downward trend if you took away the
17 assumption about the subsequent
18 transactions being flagged?
19   A.   Correct.
20   Q.   We've been using the
21 terminology of a transaction being
22 flagged. And that's language you used in
23 your report as well, correct?
24   A.   Correct.

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1   Q.   What do you mean by a
2 flagged transaction?
3   A.   Well, for my purposes it's
4 just a -- an example we were looking at a
5 minute ago, a fairly simple, if-then
6 step. I think of everything I -- I've
7 done here in terms of what you can do in
8 Excel. And so imagine that you've got
9 numbers in two columns and you've got a
10 rule that says if Column A exceeds
11 Column B, put a one in that cell. And I
12 would think of that one as a flag. And
13 the absence of that one, signifying that
14 A does not exceed B, being an unflagged
15 transaction.
16   And then it's only a slight
17 further modification to say in that third
18 column, it's a one if A exceeds B or if
19 the column above -- the value above is
20 one. And then you would just fill in
21 ones in every cell after the first time A
22 exceeds B.
23   And all I mean by flagging
24 is that it's got that checkmark or one

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1 for that transaction and everything that
2 follows it.
3   Q.   Are you of the opinion that
4 a flagged transaction means that that
5 transaction represents a suspicious
6 order?
7   A.   That's way beyond my report,
8 I think.
9   Q.   Are you --
10   A.   I'm sorry, I apologize. I
11 don't have an opinion one way or the
12 other. If -- if you inferred from my
13 answer that I think it means that it is
14 not a suspicious order, I didn't mean
15 that. I just mean I don't have an
16 opinion one way or the other.
17   Q.   Understood. But just to
18 make sure we are speaking the same
19 language. It's fair to say that you are
20 not taking the opinion that a flagged
21 transaction is necessarily a suspicious
22 order?
23   A.   Correct.
24   Q.   And it's also fair to say

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1 that you are not saying that a flagged
2 transaction is necessarily illegal or
3 representative of illegal conduct?
4   A.   Correct.
5   Q.   It's also fair to say that a
6 flagged transaction in your opinion does
7 not necessarily mean there's been a
8 failure of due diligence?
9   A.   Correct.
10   Q.   I want to take a look real
11 quick specifically at this first
12 approach, the maximum monthly trailing
13 six-month threshold.
14   And I want to -- your --
15 your -- strike that.
16   Your example here is very
17 helpful for understanding it, so I
18 appreciate that.
19   But I want to get an
20 understanding for, in practical terms,
21 various of the defendants for different
22 reasons may have gaps in their data. So
23 for example, they may have been serving a
24 pharmacy for a period of time, the

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1 pharmacy switched to a different
2 distributor, and then went back to that
3 distributor.
4   Are you familiar with those
5 kinds of changes or variations in the
6 data, just speaking generally?
7   A.   Yes.
8   Q.   Okay. How were gaps in the
9 data or entries without anything included
10 handled in figuring out the maximum
11 monthly trailing six-month threshold?
12   A.   I'm sorry, I don't think I'm
13 understanding that question.
14   Q.   Sure. So I have a
15 hypothetical for you. We can try and
16 walk through it to see if that helps to
17 clarify.
18   A.   Okay.
19   Q.   We have a pharmacy
20 purchasing from a distributor in January
21 through June, let's say of 2007. I'm
22 just picking a year. But does not
23 purchase from that distributor from July
24 through December of 2007. Okay? So

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1 there's been a gap there.
2   If the pharmacy purchases
3 from the distributor again in
4 January 2008, how do you set that
5 threshold when you pick up again with the
6 distribution to that pharmacy?
7   A.   Well, that's a good
8 question. That's a hypothetical I hadn't
9 thought of. I'd have to look at the data
10 and see the -- and see how -- how
11 significant that is.
12   A slight variant on your
13 hypothetical would be if -- if the
14 pharmacy had bought from the distributor,
15 let's say in four of the previous six
16 months, then it would be just as I
17 described it there in the example. If
18 you imagine in -- in March and May the
19 quantity is zero, so that the quantities
20 are 5,000, 7,000, 9,000, and 9,500, then
21 it still would be the case that if a
22 transaction in August put you past, in
23 this hypothetical, 9,500, not 10,000, you
24 would flag the transaction.

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1   So blanks in the six-month
2 window don't affect the calculation. The
3 conditional statement is still, if the
4 cumulative transactions that month exceed
5 the highest of the preceding six calendar
6 months, you flag the transaction.
7   We don't ever flag a
8 transaction in the first -- at least
9 under this methodology, in the first six
10 months of the purchases from a
11 distributor. But if a pharmacy is buying
12 from a distributor and then there's a gap
13 of greater than six months, six months or
14 greater, I'd have to think through and
15 maybe just check and see how that is
16 handled. It -- whether we handle it as
17 restarting the clock, but I just don't
18 recall as I sit here.
19   Q.   Do you know if you guys
20 input, you and your staff I should say,
21 input any threshold or baseline, if there
22 was no data included, so you would pick a
23 number and put it in there?
24   A.   No, not for that purpose.